# Crane Control Contactors and Relays

**Low Voltage Monitoring Relays** 



Low Voltage Monitoring Relay

## **Product Description**

The Low Voltage Monitoring Relay (LVMR) is designed specifically to address power loss during hoist lowering (regeneration) operation. The LVMR continuously monitors bus voltage and de-energizes the UV relay if the bus voltage falls below a value that will safely operate contactors and relays.

The LVMR distinguishes the difference between main power and regeneration power produced by a motor. It constantly monitors the dc bus voltage and sets the series brake automatically when it detects a power loss condition. When the voltage drops below the point where relays or contactors can reliably pick up and seal (as defined by the current NEMA standards), the hoist control panel will shut down and set the brake.

#### Installation

Installation requires mounting one device in your existing hoist panel and adding two wires.

- Remove the wire lead from the existing UV coil and the last protective interlock.
- Mount the LVMR as close as possible to the existing UV relay and reconnect the removed wire to the LVMR interlock at terminal 5.
- Add a wire from the other side of the LVMR interlock, terminal 6, to the original UV coil terminal. Using the supplied terminal lug, connect a wire from terminal 4 on the electronic module to L2 on the other side of the UV coil.

## Technical Data and Specifications

- Voltage Input Range: 230 270 Vdc.
- Ambient Temperature Range:
- Pickup Adjustment: 180 200 Vdc.
- Reaction Time: 40 milliseconds.
- Relay Contact Current Rating:□ 1.1 amp dc inductive at 230 Vdc
- Number of Contacts: 2.

#### **Dimensions**

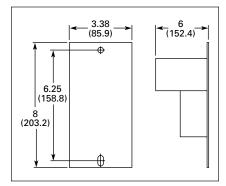


Figure 31. Approximate Dimensions in Inches (mm)

## **Wiring Diagram**

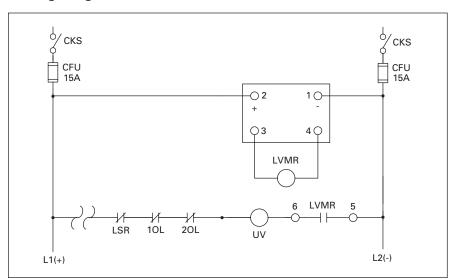


Figure 32. Low Voltage Monitoring Relay Diagram

#### **Product Selection**

#### When Ordering Specify

■ Complete Catalog Number.

#### **Table 115. Low Voltage Monitoring Relay**

Description	Catalog Number	*
Low Voltage Monitoring Relay	6011ED5	

\* Consult Sales Office for Pricing